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A275.2 Ex824Me

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A275.2 Ex824Me U. S. Dept. of Agriculture extension Service

Jashington 25, D.C. THE MECHANICS OF QUESTIONNAIRE CONSTRUCTION*

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THE PURPOSE of this article is to present concrete suggestions concerning the mechanical make-up and physical arrangement of questionnaire and check-list forms. This discussion is not concerned with the justification, purposes, strengths, weaknesses and other aspects of the questionnaire as a research instrument which are treated very thoroughly by a number of authors.

The present article is limited to a series of practical suggestions to be considered by the researcher in the actual construction, development of the physical form, and final publication of the questionnaire prior to submission to respondents.

Importance of Form and Appearance

The suggestions which follow all relate directly to assisting the investigator in obtaining the largest possible percentage of replies to his check-list or questionnaire. It is generally agreed by the authorities in educational research that more returns will be forthcoming when question - naire forms are attractively presented and easy to read and mark.

It is the conviction of the author that inclusion in a form of one or more of the suggestions listed herein probably will elicit a greater number of useable responses than would be obtained by ignoring the suggestions or by carrying them out only in part.

As Toops so clearly demonstrates, the primary objective of the investigator should be to achieve 100% response. The suggestions below should assist the investigator in realizing that objective.

Paper and Ink

- 1. The questionnaire should be placed on high quality paper.
- 2. The page size should conform to that which will be used in writing up the study.
- 3. Page size should be selected for ease in folding and mailing in standard number 7 and 8 envelopes.

^{1.} Walter S. Monroe, editor, <u>Encyclopedia of Educational Research</u>. (New York: The Macmillan Company, 1950), pp. 948-951.

^{*} Journal of Educational Research, March 1954. Permission for duplicating has been granted.

- 4. At the discretion of the investigator, in accordance with the purpose of the questionnaire, and with deference to respondents, the use of colored paper (e.g. light green, yellow) sometimes is attractive and desirable.
- 5. The use of blue ink or other colored ink may enhance the appearance of the form.
- 6. The form should be printed if feasible. The attractiveness of a printed form over a mimeographed or typed form cannot be over-emphasized. If the investigator is seriously concerned with obtaining a high percentage of returns, printing is recommended. Printing has the additional advantage of using various sizes and types of print to attract attention by setting off directions, questionnaire items, and other special features on the form for ease of reading and marking by the respondent.

Arrangement

- 1. The first or covering page of the questionnaire should contain the complete designation of the sponsoring agency centered at the top. If at all possible questionnaire investigations should receive the sponsorship of some recognized professional organization rather than to be submitted only in the name of some individual person.
- 2. The date of mailing should appear on page one.
- 3. The consecutive numbering of each questionnaire is recommended. The number assigned should appear on every page of the questionnaire and in the same location, preferably near the upper right hand corner.
 - a. Use of numbered questionnaires gives the investigator an accurate record of all questionnaires returned in the event a respondent fails to write in his name or institution.
 - b. Another advantage of numbered questionnaires is in tabulation. Instead of using tally marks, the code numbers of respondents can be placed after each item as tabulated. These numbers can then be counted. This system requires more time for tabulation but gives the investigator a consolidated report of replies to each item by respondent without having to go back through each questionnaire to find how specific individuals answered a particular item. Further, this procedure expedites the writing of the report when it is desired to name individuals or institutions answering given items in certain ways.
 - c. Use of numbered questionnaires cannot be construed as underhanded or unethical by respondents if the investigator also includes a space for the writing in of the name of the respondent and the institution he represents.
 - d. It is also suggested that each number be placed on two questionnaires for follow-up use.

- 4. A different questionnaire number should be assigned to each respondent included in the study, the numbered questionnaires being mailed to respondents according to the number assigned.
- 5. Provide a space for the respondent to fill in as he completes the form.
- 6. Provide space for the respondent's name and title.
- 7. Provide space for the organization and location of the respondent.
- 8. Include a statement giving the respondent an opportunity to complete your questionnaire with the assurance of confidential treatment of his replies if he so desires. For example, "May your name and that of your institution be mentioned specifically in connection with the data you have submitted? YES NO "

 Then, by all means, respect the desires of the respondent. It is the writer's experience that this technique will insure some confidential returns which can be used in the over-all report of data, which might otherwise never have been submitted.
- 9. Another technique for increasing the number of returns is to offer a summary of the findings of the study. For example, this line might be included, "Do you desire a summary of the findings of this study?

 YES NO "Obviously, you are obliged to send such a summary to those respondents who check this line in the "YES" space. A majority of respondents probably will check "YES."
- 10. It is frequently helpful to ask respondents to enclose supplementary charts, diagrams, figures or other materials not specifically asked for in the items themselves. However, experience shows that if such materials and data are essential to the study they should be obtained from respondents as answers to specific items within the questionnaire proper rather than to be requested as additional material to be enclosed.
- 11. The title of the study should show prominently near the top of the first or covering page.
- 12. It is recommended that the words "questionnaire" or "check-list" not appear on the form at all. It is well known that the questionnaire and check-list are used to such a great extent that many respondents do not bother to answer them any more. Reference to the questionnaire as a "form" or "instrument" may have a less irritating effect on certain respondents.
- 13. If the form can be accomplished in a relatively short time, for example, in fifteen to thirty minutes, it is recommended that this information be placed in a prominent location on the first page near the top. Respondents may be induced to answer the form if they believe it will not require too much time to do so. It is also suggested that this fact be emphasized early in any covering letter which may accompany the form before they throw the form in the wastebasket.

- 14. Include complete information about the recorder or compiler to whom the form should be returned, including full name, title, and complete address. This information should appear on the first page of the form if possible, otherwise, place it as the last item on the form. Do this even if a self-addressed envelope is enclosed for the return of the form because frequently this envelope is lost before the respondent answers the form.
- 15. The first page should contain a request for the return of the completed form (1) "at your earliest convenience," or (2) "on or before January 15, 1950." The first suggestion is favored on the assumption that the investigator has allowed sufficient time for the return and tabulation of data without putting pressure on respondents which they resent. However, many investigators prefer to place an actual, reasonable date prior to which they hope the respondent will return the form. The reasoning is that such a definite commitment date will encourage promptness on the part of respondents. The latter suggestion also is desirable when the investigator definitely is faced with a time limit for the tabulation, analysis, and reporting of the data.
- 16. On the first or covering page it usually is desirable to mention the inclosure of a self-addressed stamped envelope for returning the form.

Directions

- 1. Keep the directions as brief as possible. Try to construct items in such a manner that the method for marking them is self-evident.
- 2. Do not include in the same section of the form items requiring different types of response or marking. Set up the form in separate sections one for each type of written response required.
- 3. Provide for the mere checking of a possible answer already present on the form, where possible, rather than requiring a written answer.
- 4. Begin each new section of the form with brief instructions if necessary, then include a sample item with a sample response, if required for clarity.
- 5. Set off directions with a heavy, larger, distinctive lettering.
- 6. Space for Yes and No replies should be arranged vertically YES rather than horizontally YES NO NO
- 7. Leave some space for comment after each major item, and encourage such comment if it will help to make the meaning of the reply more explicit. Do not expect to be able to tabulate information contained in comments, however.
- 8. Number every page of the form consecutively.

- 9. On the bottom of the next to last page insert the word "over" if there are more items for completion on the last or back page. Respondents sometimes will fail to look on the back page unless reminded to do so.
- 10. If several items are listed on successive lines, and each requires a check of some kind, make it easier for the respondent by skipping a line after every third item.

Covering Letter

- 1. Print the covering letter if possible. Otherwise, use the most attractive means of publication available.
- 2. Address the letter personally and specifically to individual respondents.
- 3. Arouse interest in the study briefly and quickly in the letter.
- 4. Use the letter head of the sponsoring agency, or of the sending institution.
- 5. Obtain the recommendation, sponsorship, or approval of noted authorities for inclusion in the letter, and their signatures at the bottom of the page along with that of the compiler.
- 6. Keep the letter short and on one page.

Envelopes

- 1. Have the return address of the compiler printed on the outgoing envelopes.
- 2. Print the address of the compiler on the return, self-addressed envelope.
- 3. Address envelopes in the same manner as the covering letter, to respondents personally by name.
- 4. The return envelope should be one standard size smaller than the sending envelope so that one will fit into the other without folding.
- 5. The questionnaire should be folded so that it may be returned in the smaller envelope without having to be refolded differently.

Mailing

1. By accurate use of letter weighing scales it can be determined just what weight paper, and what weight and size envelopes can accommodate the questionnaire for minimum postage rates. For example, the writer was able to send two copies of a four page questionnaire, a covering letter, and a return envelope for 3 cents postage by weighing out the envelopes carefully, then determining just what weight paper was necessary to use for printing the questionnaire and the covering letter to stay within the 3 cent limit. Attention to such details easily can reduce postage costs fifty per cent or more.

- 2. It is recommended that two copies of the questionnaire be sent to each potential respondent, plus a covering letter and a self-addressed, stamped envelope. The covering letter should state that one copy of the form is for use as a work sheet and for file, and the other for return to the compiler. Many respondents desire to fill out one form roughly with pencil, then turn it over to a secretary for completion of the second form on the typewriter.
- 3. Most outgoing questionnaires, covering letters and self-addressed envelopes, can be accommodated in a U. S. Government No. 8 stamped envelope, unless the form is unusually large or lengthy.
- 4. A No. 7 U. S. Government stamped envelope should be used for return of the form to the compiler. The No. 7 envelope will fit into the No. 8 envelope without folding, and both No. 7 and No. 8 will hold regular $8\frac{1}{2}$ x 11 inch size paper folded two times lengthwise.

Follow-up Letter

- 1. The follow-up letter likewise should be printed, or otherwise reproduced in the most attractive style possible.
- 2. The follow-up letter should contain one additional copy of the questionnaire and another self-addressed stamped envelope.
- 3. Do not attempt to send questionnaires for two cents by leaving the envelope flap open rather than sealed. If the study is worth doing, it is worth three cents in postage to assure proper care for valuable data.
- 4. It is recommended that follow-up letters be dispatched two weeks after the probable date of receipt of the original questionnaire by respondents. This procedure seems to be superior to waiting a month or longer before initiating follow-up requests.
- 5. Some authorities recommend sending as many as eight follow-ups in an effort to achieve 100% response.

Summary

In summary, it will be noted in this list of suggestions for the mechanical construction of questionnaires that the emphasis has been on consideration for the respondent. The ultimate objective is to obtain as many responses as possible, in the form of completed questionnaires which provide useable data. If questionnaire forms meet criteria of physical attractiveness and obvious consideration for the respondent, it is believed that the percentage of replies will be sufficiently high to fulfill the requirements of the investigator. Every conceivable inducement should be used in the hope of convincing one more potential respondent to take the time and effort necessary to answer the questionnaire.



